



Users Guide

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Introduction

To *trade* currencies (a.k.a. foreign exchange or FX), you need to know what drives them in order to predict future values. From a macro sense, the value of a currency is driven mainly by two things: a country's underlying economic environment and policy decisions, and the measures of success of those policies.

The primary purpose of the *Currency Briefing* newsletter is to aggregate raw data (eg CPI, PPP, current acct balance, sovereign CDS rates, trader sentiment etc.) and organize it into a comparative format for asiting in trading plans. In addition, some relevant, topical economic news from many sources (Bloomberg, Financial Times, Retail Traffic, The Economist & others) is also included. A further goal in this newsletter is not to simply describe the reasons for the *current* equilibrium, but rather uncover data which will drive changes in the future.

Fiscal policy is driven by the government, generally to stimulate the economy, but sometimes to slow it down in times of high inflation. Fiscal policy is reflected in the *control factors* a government has, such as the central bank rate, government budget surplus or deficit, and to a lesser extent other factors (financial market controls such as "uptick" rules, reserve requirements for banks, etc).

The *measures of success* of a country's fiscal policies are indicators like the consumer price index (CPI), unemployment, GDP growth, the current account balance, consumer and business sentiment, retail trade growth and many others.

To trade FX then, you need to know what the current fiscal policies are, what the measures of economic success are, and the current sentiment for each currency. Actually, you need to know what the current situation is, but more importantly, have a good idea of what it might be in the future. After all, the current price reflects current reality, and you are placing a bet on the future reality.

Additionally, currencies are traded in pairs- one must go long one and short another. Therefore, all trades are a bet on the relative values of the two currencies. So in another sense, FX is sentiment-driven, because it reflects the relative sentiment of investors and their perceptions of the two economies in question. Sentiment will be affected by both the control factors (especially central bank rates), the measures of success of an economy and intangibles- the "mood" of the market. Sentiment can be measured to some extent by currency and interest rate futures.

Because the currency pairs with USD as one side tend to have more liquidity and less volatility, the more successful traders tend to only trade the currencies against the \$. The Briefing assumes this approach is in use, but also supports trading crosses (ie, pairs without USD as one element).

Organization

The Currency Briefing is organized in the following manner.

1. World Market and USD comments

News clippings relevant to world economic status.

2. Risk Aversion/Risk Appetite Measures

A table collates those factors which determine whether the FX markets are currently in a “risk aversion” or risk appetite” mode, such as the 10 year treasury rate, volatility index, TED spread, gold price, Counterparty risk, etc. See the “details” section for what effect each one represents.

4. Country-Specific Data for USA, EUR, GBP, JPY, CAD, AUD in a comparative format

Each country (or “zone”, in the case of the Euro) is covered in detail. Here’s what’s included:

- News releases for the coming week
- Central bank meeting schedule
- Fundamentals, compared to the US, including central bank rate, current acct balance, budget balance, unemployment, GDP change, PPP (and spot), CPI, sovereign credit risk and most recent changes
- Sentiment measures, including option risk reversals and the most recent long and short changes of currency futures on the Chicago Mercantile exchange
- Most recent economic news, from sources such as Bloomberg, Financial Times, Reuters and others
- Trailing 3 month equities charts
- A daily chart of the currency pair, going back 3 months, with support, resistance, RSI and other technical indicators superimposed
- Commentary by this author
- 4. Commodities report. This includes trailing 3 month charts of various commodities indices, including Baltic Dry, base metals index, Reuters Jeffries and DJ commodities index, and Oil

6. Options corner- this is a special feature analyzing the major currency pairs, and selecting particular option strategies best suited to profit form the current situation

7. Economics chart- a large chart comparing the 18 largest economies of the world.

From time to time I will include other relevant data that becomes available.

Short Tutorials on reported elements

Budget Balance

Measure the difference in value between the central government's income and spending for the year-to-date

Carry Trade

A strategy in which an investor sells a certain currency with a relatively low interest rate and uses the funds to purchase a different currency yielding a higher interest rate. A trader using this strategy attempts to capture the difference between the rates - which can often be substantial, depending on the amount of leverage the investor chooses to use. Here's an example of a "yen carry trade": a trader borrows 1,000 yen from a Japanese bank, converts the funds into Australian dollars and buys a bond for the equivalent amount. Let's assume that the Aussie bond pays 7% and the Japanese interest rate is set at 0.5%. The trader stands to make a profit of 6.5% (7% - 0.5%), as long as the exchange rate between the countries does not change. Many professional traders use this trade because the gains can become very large when leverage is taken into consideration. If the trader in our example uses a common leverage factor of 10:1, then he can stand to make a profit of 65%.

The big risk in a carry trade is the uncertainty of exchange rates. For example, if the Australian dollar was to fall in value relative to the Japanese yen, then the trader would run the risk of losing money. Also, these transactions are generally done with a lot of leverage, so a small movement in exchange rates can result in huge losses unless hedged appropriately.

CDS

Credit default Swap. Credit default swaps are insurance-like contracts that promise to cover losses on certain securities in the event of a default. They typically apply to municipal bonds, corporate debt and mortgage securities and are sold by banks, hedge funds and others. The buyer of the credit default insurance pays premiums over a period of time in return for peace of mind, knowing that losses will be covered if a default happens. The rate quote, in basis points of bps, is an indication of the risk of default. Obviously, the higher the rate, the higher the risk, and the weaker the country/economy.

CPI

Consumer Price Index.

CSPI

CSPI (Corporate Service Price Index) is a price index which compiles transaction prices of services produced domestically and imported among corporations. It is compiled as an economic indicator of services prices, and is also used as an index for business contracts. It is captured across primary, secondary and tertiary industries. It is affected by supply-demand conditions of the labor market.

Current Account (Balance)

This is the account that holds import and export transactions for a country- its "Trade balance". For example, if Canadian exports oil to a US refinery, that refiner must buy Canadian dollars on the Forex market to pay for that oil. Thus, there is an increase in the demand for Canadian dollars, leading to appreciation of the "Loonie".

A current account deficit is when a country's total *imports* of goods, services and transfers are greater than the country's total *exports* of goods, services and transfers. This situation makes a country a net debtor to the rest of the world.

When the current account deficit increases, the underlying currency value declines.

GDP

The monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

GDP is commonly used as an indicator of the economic health of a country, as well as to gauge a country's standard of living. When GDP numbers grow, the value of the underlying currency rises.

Interest Rates

By far the most visible and obvious power of many modern central banks is to influence market interest rates; contrary to popular belief, they rarely "set" rates to a fixed number. Although the mechanism differs from country to country, most use a similar mechanism based on a central bank's ability to create as much fiat money as required.

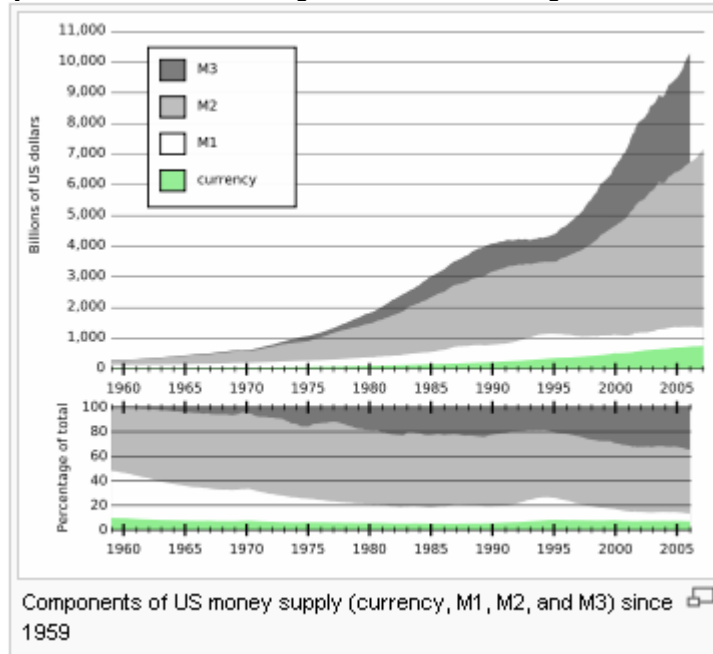
The mechanism to move the market towards a 'target rate' (whichever specific rate is used) is generally to lend money or borrow money in theoretically unlimited quantities, until the targeted market rate is sufficiently close to the target. Central banks may do so by lending money to and borrowing money from (taking deposits from) a limited number of qualified banks, or by purchasing and selling bonds. As an example of how this functions, the Bank of Canada sets a target overnight rate, and a band of plus or minus 0.25%. Qualified banks borrow from each other within this band, but never above or below, because the central bank will always lend to them at the top of the band, and take deposits at the bottom of the band; in principle, the capacity to borrow and lend at the extremes of the band are unlimited. Other central banks use similar mechanisms.

It is also notable that the target rates are generally short-term rates. The actual rate that borrowers and lenders receive on the market will depend on (perceived) credit risk, maturity and other factors. For example, a central bank might set a target rate for overnight lending of 4.5%, but rates for (equivalent risk) five-year bonds might be 5%, 4.75%, or, in cases of inverted yield curves, even below the short-term rate. Many central banks have one primary "headline" rate that is quoted as the "Central bank rate." In practice, they will have other tools and rates that are used, but only one that is rigorously targeted and enforced.

Higher central bank rates are bullish for currencies, because they make the currency desirable for the Carry Trade.

Money supply

In the money supply statistics, **central bank money** is **M0** while the **commercial bank money** is divided up into the **M1-M3** components. Generally, the types of commercial bank money that tend to be valued at lower amounts are classified in the narrow category of **M1** while the types of commercial bank money that tend to exist in larger amounts are categorized in **M2** and **M3**, with



M3 having the largest.

- **M0**: The total of all physical currency, plus accounts at the central bank that can be exchanged for physical currency.
- **M1**: M0 - those portions of M0 held as reserves or vault cash + the amount in demand accounts ("checking" or "current" accounts).
- **M2**: M1 + most savings accounts, money market accounts, and small denomination time deposits (certificates of deposit of under \$100,000).
- **M3**: M2 + all other CDs (large time deposits, institutional money market mutual fund balances), deposits of eurodollars and repurchase agreements.
- **M4**: Cash outside banks (ie. in circulation with the public and non-bank firms) + private-sector retail bank and building society deposits + Private-sector wholesale bank and building society deposits and Certificate of Deposit.

PCE

Personal Consumption Expenditure, or PCE, is indicator is a United States-wide indicator of the average increase in prices for all domestic personal consumption. It is indexed to a base of 100 in 1992. Using a variety of data including U.S. Consumer Price Index and Producer Price Index prices, it is derived from the largest component of the Gross Domestic Product in the BEA's National Income and Product Accounts, personal consumption expenditures.

The less volatile measure of the PCE price index is the core PCE price index which excludes the more volatile and seasonal food and energy prices. In comparison to the headline CPI, which uses one set of expenditure weights for several years, this index uses a Fisher Price Index, which uses expenditure data from both the current period and the preceding period. Also, the PCE uses a chained index which compares one quarter's price to the last quarters instead of choosing a fixed base. This price index method assumes that the consumer has made allowances for changes in relative prices. The PCE rises about 1/3% less than the CPI, a trend that dates back to 1992.

A rising PCE is bullish for a currency, indicating a growing economy, and perhaps even contributing pressure towards an increased interest rate.

PMI-

Purchasing Managers Index, or PMI is an indicator of the economic health of the manufacturing sector. The PMI index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. A PMI of more than 50 represents expansion of the manufacturing sector, compared to the previous month. A reading under 50 represents a contraction, while a reading at 50 indicates no change, and the underlying currency value moves in sympathy.

In fact, the currency actually tends to move with *trends* instead of absolute value. For example, if the new reading is 49 (contraction), but the previous reading was 45, the currency might very well move up in value.

Purchasing Price Parity

Purchasing-power parity is one of the statistical benchmarks used for exchange-rate forecasts. Economic theory suggests that the PPP should be nearly the exchange rate.

PPP estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power.

The relative version of PPP is calculated as:

$$S = \frac{P_1}{P_2}$$

Where:

"S" represents exchange rate of currency 1 to currency 2

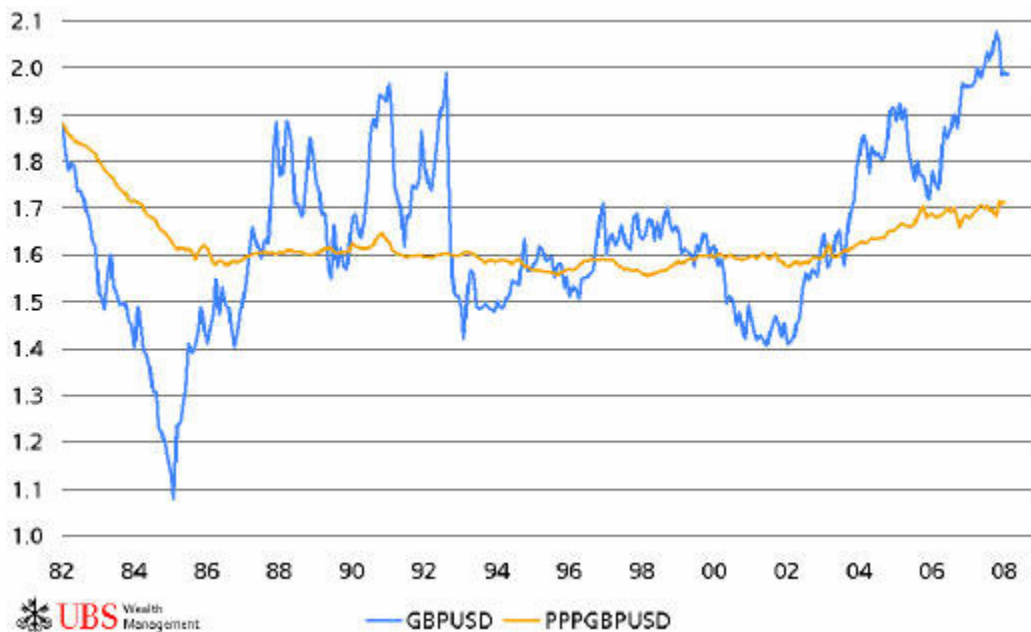
"P₁" represents the cost of good "x" in currency 1

"P₂" represents the cost of good "x" in currency 2 In other words, the exchange rate adjusts so that an identical good in two different countries has the same price when expressed in the same currency.

For example, a chocolate bar that sells for C\$1.50 in a Canadian city should cost US\$1.00 in a U.S. city when the exchange rate between Canada and the U.S. is 1.50 USD/CDN. (Both chocolate bars cost US\$1.00.)

When there are significant differences between exchange rates and purchasing-power parity, there is normally a tendency towards restoring the balance (mean reversion), *although the correction process can take several years*. That is, PPP is not a good predictor of short term currency moves. Here is a graph (courtesy UBS bank) showing how the exchange rate and PPP track for the GBP for the last 16 years. This graph suggests that the GBP is currently inflated.

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Here is a table of the major currencies exchange rates and PPP, as of Aug 4, 2008:

Currency	Exchange rate	PPP	Difference
AUD/USD	.93	.68	37% overvalued
GBP/USD	1.97	1.72	15% overvalued
USD/CAD	1.027	1.04	1.25% overvalued
EUR/USD	1.55	1.22	27% overvalued
USD/JPY	107.7	92	17% undervalued
USD/CHF	1.05	1.19	12% overvalued

Risk Aversion/Risk Appetite

Money usually flows around the world seeking out the highest risk-adjusted return. But when money's afraid, say in time of war or terrorist attacks, it runs for cover. It doesn't care anymore about returns, only self-preservation (ie preservation of capital). In these times, it exits the high risk/return assets, and runs to Switzerland or Japan and their low risk/low return currencies. When a currency is being bought (say CHF in risk-averse times), its value rises, and when a currency is sold, its value drops. Therefore, the low-risk currencies (CHF, JPY) benefit from risk aversion, and the higher-yielding currencies being abandoned (AUD, NZD, GBP) weaken. The opposite happens, of course, in risk appetite.

Risk aversion and the Carry Trade are coupled, although perhaps not as much as historically. There are multiple indicators of risk aversion or risk appetite that can help measure whether the mood is greed or fear. When the price of Gold rises, the US 10 year Treasury Rate declines, equity market volatility increases, equity markets themselves fall, and the TED spread increases, risk aversion is indicated. Opposite directions indicate risk appetite.

TED spread

TED (an acronym from *T-bill* and *ED*, the sticker for Eurodollars) spread is the difference between the three month T-bill interest rate and three month LIBOR. The TED spread is a measure of liquidity and shows the degree to which banks are willing to lend money to one another.

The TED spread can be used as an indicator of credit risk. This is because U.S. T-bills are considered risk free while the LIBOR rate reflects the credit risk of lending to commercial banks. As the TED spread increases, the risk of default (also known as counterparty risk) is considered to be increasing, and investors will have a preference for safe investments. As the spread decreases, the risk of default is considered to be decreasing. *An increasing TED spread is a risk aversion indicator.*

VIX or volatility index

VIX is the ticker symbol for the Chicago Board Options Exchange Volatility Index, a popular measure of the implied volatility of S&P 500 index options. Referred to by some as the *fear index*, it represents one measure of the market's expectation of volatility over the next 30 day period. *An increasing VIX is a risk aversion indicator.*

TIC

Treasury International Capital, or TIC summarizes the flow of stocks, bonds, and money market funds, to and from the United States. The headline figure is the difference in value between American purchases of foreign securities and foreign purchases of American securities, expressed in millions of dollars. The Treasury International Capital or TIC statement is a major component of the American capital account and gives valuable insight into foreign demand for American investments and dollar. A positive figure indicates that more capital is entering the US than leaving as sales of American securities to foreigners exceed American purchases of foreign securities. Such positive figures suggest that American security markets are competitive with those of other countries. Foreign security purchases are especially important in the case of a trade deficit, as a positive figure can offset the depreciating effect of a trade shortfall. On the contrary, a negative or declining TIC figure reflects a declining capital flow picture. Outflows are indicative of weaker demand for US assets which puts downward pressure on the value of the dollar.

PPI

A Producer Price Index (PPI) measures average changes in prices received by domestic producers for their output. It is one of several [price indices](#) calculated by national statistical agencies. Its importance is being undermined by the steady decline in manufactured goods as a share of spending.